

Current Water Conditions in Massachusetts

November 13, 2008



- October precipitation was below normal
- October streamflows were above normal
- October ground-water levels were above normal and normal
- October reservoir levels were slightly above normal

Precipitation Conditions

October state-wide precipitation equaled an estimated 2.83 inches, which is about 76 percent of the long-term average for October. The regions of Massachusetts received between 124 percent (West) and 58 percent (Cape Cod and Islands) of average precipitation during October. A rapidly intensifying low pressure that tracked west of Massachusetts on the 25th and 26th of October brought heavy precipitation in excess of three inches to northwestern areas and caused the Hoosic River at Williamstown to rise above flood stage. A table of October 2008 estimated precipitation statistics, based on precipitation data from the Department of Conservation and Recreation and National Weather Service precipitation monitoring networks is attached. A map at the back of this report shows the distribution of October total rainfall in New England.

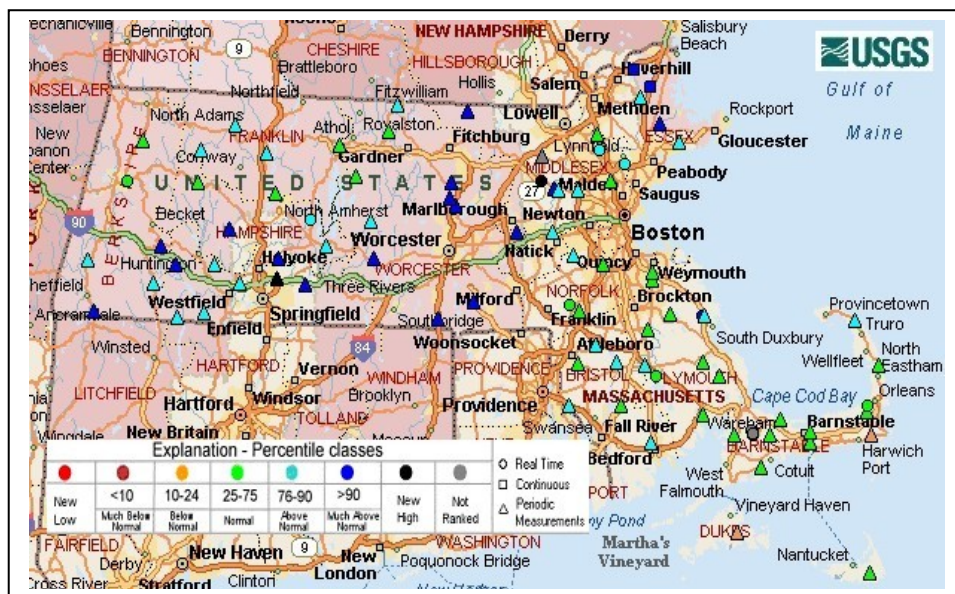
In general, November rainfall to date is deficient, averaging 25 to 75 percent of normal. However rainfall events are forecast for the next 4 days.

Ground Water Levels

Ground-water levels reported by the United States Geological Survey (USGS) at the end of October 2008 were normal (green symbols on map) and above normal (light and dark blue symbols on map) in Massachusetts. The USGS assessment of ground-water levels is based on 124 wells in Massachusetts and Rhode Island with 10 or more years of record. Ground water and surface water conditions in MADCR drought management task force regions are shown in a table at the end of this report.

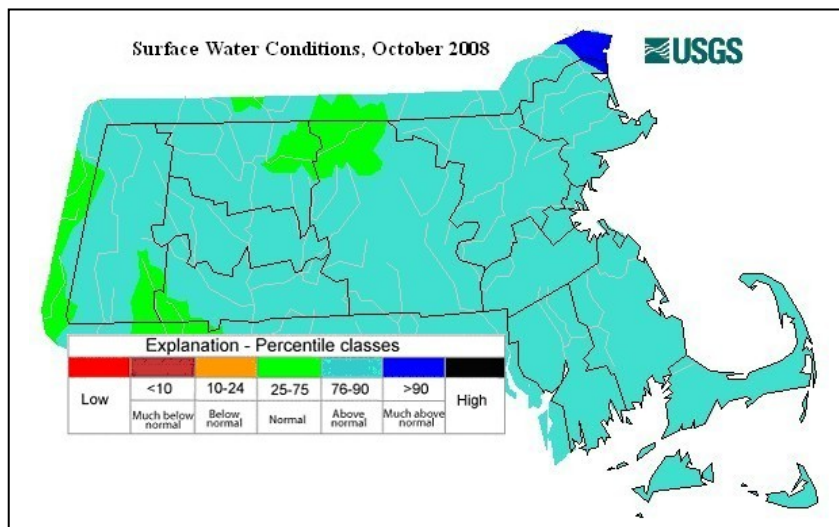
The USGS ground water level map and a Water Conditions Statement for the end of October 2008 can be viewed at the web site:

http://ma.water.usgs.gov/water/water_g.htm



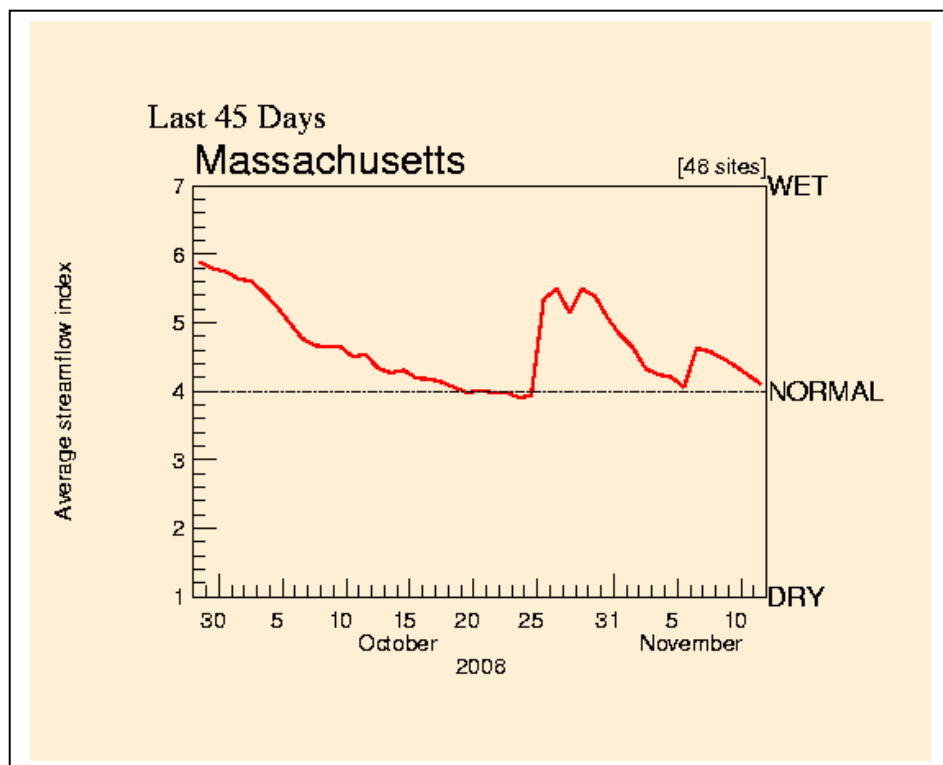
Stream Flow

During October stream flows that are monitored by the Commonwealth of Massachusetts and United States Geological Survey (USGS) cooperative stream gaging program were generally normal (green areas on map and above). The graph below depicts a composite daily streamflow relative to normal streamflow for Massachusetts as of November 12, 2008. Above normal streamflow at the beginning of October declined to near normal at mid month then rose in response to precipitation events late in the month. Streamflow in November remained slightly above normal. The graph is a composite of 48 real time gages across the state with a long period of record.



Additional information on streamflow is available from the USGS web page:

<http://ma.water.usgs.gov/water/waters.htm>



KEY:

- 1 = New record low for day
- 2 = < 10th percentile
- 3 = 10th – 24th percentile
- 4 = 25th – 74th percentile
- 5 = 75th – 89th percentile
- 6 = ≥ 90th percentile
- 7 = New record high for day

Water Supply Reservoir Levels

Surface water reservoir percent full values for water supply sources provided by water suppliers are listed below. The reservoir percent full values listed are for the end of October and are reported to be generally slightly above or normal for this time of year.

October /November 2008 Massachusetts Reservoir Status

Reservoir/City or Town	Percent Full	Reservoir/City or Town	Percent Full
Quabbin	100	Beverly/Salem	76.8
Worcester	99.7	Lynn	60.6
Cobble Mt./ Springfield	88	Taunton/New Bedford/Assawompsett	98.9

Note: N.A. Indicates data not available for this report

Drought Indices/Forecasts

The National Drought Mitigation Center's (NDMC's) November 11, 2008 Drought Monitor Map shown at right indicates no drought conditions in Massachusetts or New England.

Standardized Precipitation Index:

The Western Regional Climate Center's (Desert Research Institute, University and Community College System of Nevada) 1, 3, 6, and 12-Month Standardized Precipitation Index through the end of October shows conditions ranging from normal (1-month) to extremely wet (12-months) across Massachusetts.

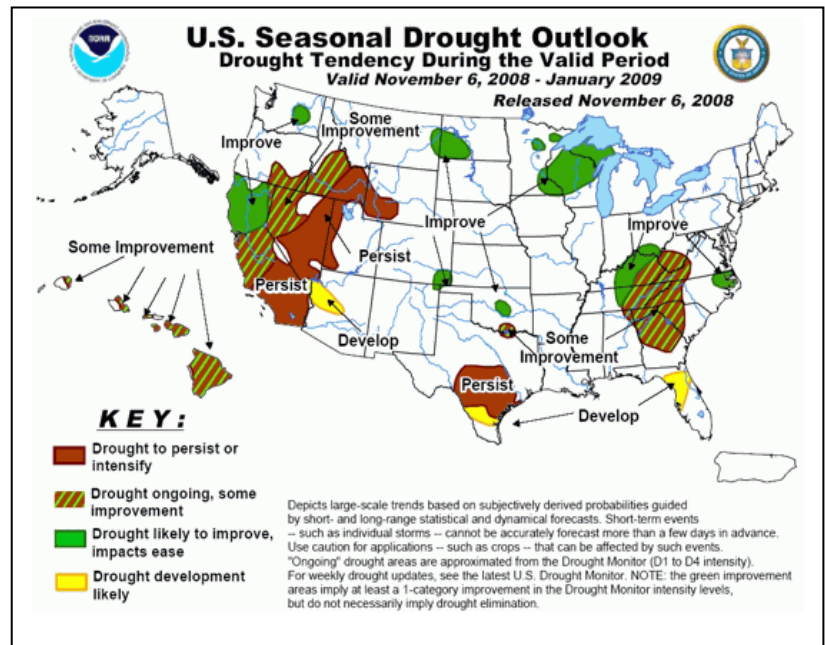
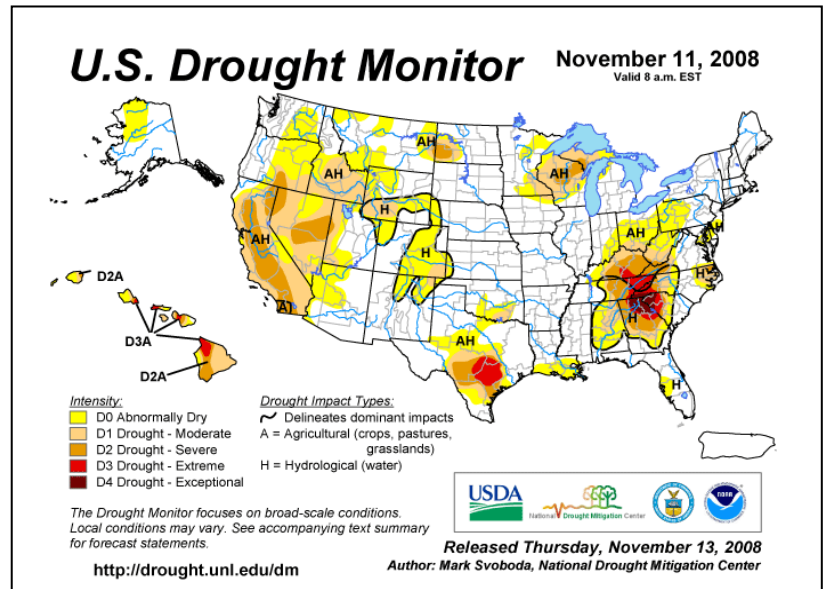
NWS/NOAA's Climate Prediction Center: The U.S. Seasonal Drought Outlook dated November 6, 2008 predicts normal conditions for Massachusetts through January 2009.

Extended Forecasts

Rain associated with a low pressure system and then a cold front passage is forecast for this afternoon through Sunday. Total forecast rain for the period is about 1.5 inches. A period of fair, colder than normal, weather should follow and continue into the middle of next week.

The National Weather Service Climate Prediction Center's extended 6-10 day forecast predicts below normal temperatures and normal rainfall. The 8-14 day forecast is for below normal temperatures and normal rainfall. The 1-month forecast is for above normal temperature and normal rainfall.

The NWS Climate Prediction Information can be found at <http://www.cpc.noaa.gov/index.php>





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GENERAL WATER CONDITIONS IN MASSACHUSETTS - OCTOBER 2008

EOEEA and MEMA DROUGHT MANAGEMENT PLAN REGIONS

[\(link to Massachusetts regions – source MADCR\)](#)

Massachusetts Regions	Surface-Water Conditions	Ground-Water Conditions
Cape and Islands	above normal	normal
Southeast	above normal	normal
Northeast	above normal	above normal
Central	above normal	normal
Connecticut River	above normal	above normal
Western	above normal	above normal

Note: Surface- and ground-water conditions for individual streamflow-gaging stations and wells may differ from general conditions

Table from USGS and can be viewed in the Monthly Water Conditions Statement located at:

<http://ma.water.usgs.gov/water/default.htm>

This report was prepared by the Massachusetts Department of Conservation and Recreation. Data were obtained from the sources described in the report and may be preliminary in nature. Additional information, previous and future water conditions reports can be found on our web site: <http://www.mass.gov/dcr/waterSupply/rainfall/>